

BOOK REVIEWS

A FIELD GUIDE TO THE INSECTS OF AMERICA, NORTH OF MEXICO, by Donald J. Borror and Richard E. White, 1970. 404 pp., more than 1300 illustrations, 16 color plates. Houghton Mifflin Co., Boston. \$4.95.

This is the latest of the Peterson Field Guide series of natural history manuals. Introductory chapters deal with the necessary preliminaries to work with insects, such as structure, wing venation, growth and metamorphosis and general classification, as well as methods and equipment for collecting and preserving specimens. These are followed by a series of systematic chapters which briefly describe the other groups of Arthropods and take up the insects order by order. A pictorial key in the end pages shows the orders and their diagnostic characters most ingeniously, and a similar one deals with the chief divisions of the Coleoptera. There are very few formal keys. A total of 579 families is given, with the chief characteristics and other information for each. Very small families and those with only very rare species are treated only briefly. The subfamilies of large families are also characterized. Most of the families and subfamilies are represented by pictured examples, and often by figures of the wing venation. Some details about characteristic environments, habits and behavior and, often, economic importance are usually given. Wide use is made of the very valuable "Peterson technique" of indicating by means of arrows on an illustration the most important taxonomic characters. The illustrations are mainly the work of the junior author, who also prepared the section on the Coleoptera. They are most accurately, beautifully and sensitively done.

The enormous numbers and complexity of the insects pose an unequalled problem for authors. To compress even a minimal amount of information necessary for an understanding of the group into a single, relatively small volume, as the authors of this field guide have done, was a task that commands our respect. This book will undoubtedly be very valuable, not only to all persons seriously interested in natural history, but also to a great many entomologists. It must be seen, studied and used to be fully appreciated. The one question in my mind is whether it would not have been better if the authors had been even more selective and had omitted, except, perhaps, by name, the families that almost every amateur and, in fact, most entomologists will almost certainly never encounter. In the space thus gained it would have been possible to give something more like adequate treatment to families of which everybody is sure to encounter many species anywhere. As a lepidopterist I can stand the idea of the Dalceridae (two rare species), Manidiidae (one rare species) and Cinophilidae (one species) going unmentioned; and I would like to see the Noctuidae (over 2700 species) represented proportionately to the Scarabaeidae (nearly 1300 species). However, aside from such intramural differences of opinion, I feel that this Field Guide is a worthy member of the distinguished series in which it takes its place, and that its authors and publishers are very much to be congratulated.

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AMERICAN MUSEUM OF NATURAL HISTORY

TAXONOMIST'S GLOSSARY OF GENITALIA IN INSECTS. Edited by S. L. Tuxen. Second edition, revised and enlarged. 1970, Munksgaard, Copenhagen, 359 pp., 248 figs.

The first edition of this book, published in 1956, became an "instant classic" which no serious worker in insect taxonomy could afford to ignore. It was soon exhausted, showing how badly it was needed. In the preparation of the second edition, to which some new authors have contributed, advantage was taken of the opportunity to expand the book greatly, add new illustrations, and cover the most recent literature. In addition to the